

REMARKS

Reconsideration of the instant application is respectfully requested. The present amendment is responsive to the Office Action of April 7, 2003, in which claims 1-4 and 6-23 are presently pending. The indicated allowability of claims 2-4, 9-10 and 15-18 have been withdrawn in view of U.S. Patent 6,013,557 to Wu, et al. (Wu). Of the previously pending claims, claims 1, 8-15, 17 and 23 are now rejected under 35 U.S.C. §102(b), as being anticipated by Wu. Furthermore, claims 2-4 and 16 stand rejected under 35 U.S.C. §103(a), as being unpatentable over Wu, in view of the publication to Bomchil, et al., or in view of the publication to Cristoloveanu, et al. For the following reasons, however, it is respectfully submitted that the application is now in condition for allowance.

Claims 1, 2, 9-12, 15, and 19-21 have been amended as indicated above in order to more particularly point out that the oxidation of the semiconductor substrate surface also comprises the deposition of oxide such as by chemical vapor deposition (CVD). In addition, claims 13 and 14 have been amended to point out that that the step of converting the exposed semiconductor substrate material from a non-porous silicon material to a porous silicon material is through one of an epitaxial silicon process and a chemical vapor deposition.


The Wu reference does not teach or disclose that the substrate oxidation (even the porous silicon regions) is implemented by deposition of an oxide material, as is now presently claimed. Instead, each embodiment of the Wu patent utilizes a rapid thermal anneal to oxidize the silicon. See, for example, column 4, lines 23-27; column 5, lines 5-8, lines 24-26, lines 46-48, lines 61-63; column 6, lines 35-37; column 7, lines 30-32. Because Wu does not teach or disclose each and every element of the amended claims, it does not anticipate the same.

Moreover, as to the additional §103 rejections based upon the Bomchil/Cristoloveanu publications, claims 13 and 14 further recite that the step of converting the exposed semiconductor substrate material from a non-porous silicon material to a porous silicon material is through one of an epitaxial silicon process and a chemical vapor deposition, respectively, as described on page 5, lines 2-8 of the specification. The Bomchil/Cristoloveanu publications relate solely to oxidation of silicon by anodization in a concentrated HF solution, while the Wu reference obtains porous silicon regions by implantation of light ion impurities (e.g., as discussed in column 4, lines 11-13). Since this claimed method of conversion of non-porous silicon to porous silicon is missing from the cited references, the §103 rejections are also overcome on this basis.

For the above stated reasons, it is respectfully submitted that the present application is now in condition for allowance. No new matter has been entered and no additional fees are believed to be required. However, if any fees are due with respect to this Amendment, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,
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